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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,200	09/10/2003	Michael Haul	P24085	3243
· · · · · · · · · · · · · · · · · · ·	90 02/12/2007 & BERNSTEIN, P.L.C.		EXAMINER DRODGE, JOSEPH W	
1950 ROLAND (	CLARKE PLACE			
RESTON, VA 20	)191		ART UNIT	PAPER NUMBER
			1723	
SHORTENED STATUTORY	PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVER	V MODE
			DELIVERY MODE	
3 MON	ГНS	02/12/2007	FLECTRONIC	

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		Application No.	Applicant(s)				
		10/658,200	HAUL, MICHAEL				
	Office Action Summary	Examiner	Art Unit				
		Joseph W. Drodge	1723	_			
Period fo	The MAILING DATE of this communication app r Reply	ears on the cover sheet with t	he correspondence address				
WHIC - Exter after: - If NO - Failur Any r	CRTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE is a sign of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICA- 16(a). In no event, however, may a reply rill apply and will expire SIX (6) MONTHS cause the application to become ABANI	TION. be timely filed from the mailing date of this communication DONED (35 U.S.C. § 133).				
Status							
1)🖂	Responsive to communication(s) filed on 20 De	ecember 2006.					
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 1	1, 453 O.G. 213.				
Dispositi	on of Claims						
5)□ 6)⊠	Claim(s) <u>1-3,6-25 and 37-43</u> is/are pending in tage of the above claim(s) _ is/are withdrawn from Claim(s) is/are allowed.  Claim(s) <u>1-3,6-25 and 37-43</u> is/are rejected.  Claim(s) is/are objected to.	• •					
8)	Claim(s) are subject to restriction and/or	election requirement.					
Applicati	on Papers						
10)	The specification is objected to by the Examine The drawing(s) filed on is/are: a) accent applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	epted or b) objected to by drawing(s) be held in abeyance. fon is required if the drawing(s)	See 37 CFR 1.85(a). is objected to. See 37 CFR 1.121(d	d).			
Priority u	inder 35 U.S.C. § 119						
12)[ / a)[	Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the prior  application from the International Bureau  see the attached detailed Office action for a list	s have been received. s have been received in Appl ity documents have been red i (PCT Rule 17.2(a)).	ication No ceived in this National Stage				
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	Paper No(s)/M	mary (PTO-413) lail Date mal Patent Application (PTO-152)				

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Claims 1-3,6-24 and 37-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each independent claim, it is unclear if actual control of drum rotation is positively recited, since "detection device" infers only detection with no corresponding structural feature for controlling present in the claims.

Regarding terminology, "lengthwise" and "crosswise", it is unclear whether these terms are relative to respective feeding mechanisms or to an undefined axis of drum and/or magazine or to other components, respectively.

It is unclear if presence of a magazine, per. Se. is a positively recited structural feature of the claimed device/system.

Structural relationship of drum and magazine is unclear; for instance, it is unclear if the claims permit or preclude there being an intermediate component for feeding between drum and filter element.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.

- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3,6-10,14-17,21-24,37,39,41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over newly cited Kruse et al patent 3,805,477 in view of newly cited Edwards et al patent 2,649,761 and Molins et al patent 3,062,588.

Kruse et al disclose a system for assembling plain cigarettes and cigarette filters/rods/stubs into assembled cigarettes, then assembling these into cigarette packs utilizing an assembling machine and a storing hopper/magazine; the system comprising a plurality of drums 5001, 5002 having seats or flutes and conveying means 5023 for inserting and transporting the cigarette stubs. These drums include drums which include axially aligned flutes/seats for seating cigarettes (column 5, lines 5-15) and machine for combining plain cigarettes and stubs/filter elements carries axially aligned cigarettes (column 19, lines 42-45). Hence a mechanism for feeding the filter elements in a lengthwise axial manner to the assembling machine is suggested. A conveyor belt mechanism 5023 feeds the filter stub elements/cigarettes towards and into the filter element magazine in a cross-wide axial manner relative to both the elongate axis of the conveyor belt and the vertical axis and possibly a horizontal axis of the hopper/magazine (see especially figure 3 and column 19, lines 33-57).

The claims first differ in explicitly requiring the cigarette/stub assembling means to constitute a drum having seats or flutes and the filter element feeding mechanism to feed in a lengthwise axial manner relative to the drum. However, Edwards teaches

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conveyor belt feeding mechanism 5 for feeding the cigarette stubs in a lengthwise manner to be received, via transfer mechanism 6 to assembling drum 7 where the stubs are axially seated as they are assembled into complete cigarettes (figure 1 and column 3, lines 56-70). Also, Molins teaches to assemble cigarette filter elements/stubs into cigarettes using assembler drum 10 (figure 1 and column 4, lines 1-12). It would have been obvious to one of ordinary skill in the art to have utilized a rotatable drum with seats/flutes aligned with the filter element feeding device as in Edwards and Molins in the system of Kruse et al, since such arrangement would facilitate a relatively compact arrangement of parts requiring a relatively short-length and diameter of assemblages.

The claims also differ in requiring a detection device that detects the filter elements and operable to control system operations and drum rotation. Some of the claims, claims 37,39, etc. require such detection device to be located so that the filter elements move past such detection device as they are fed to the assembly drum. However, Molins teaches such detection devices 39/41 (column 5, lines 10-22 and 42-59 and column 6, lines 22-40). Also see column 1, line 53-column 2, line 2 and column 2, line 55-column 3, line 52 regarding control of feeding means and conveying means relative to control of driving means/assembling drum). It would have been further obvious to one of ordinary skill in the art to have utilized the detection device of Molins in the Kruse system to coordinate movement of stubs/filter elements and plain cigarettes to ensure accurate assembly and accurate production rates.

Molins et al also disclose additional features and elements of various, other, dependent claims. For claims 2 and 3, the filter elements may be rods ("stubs") or rod-

shaped (column 1, lines 11-24). For claims 4 and 9, the elements are fed by conveying mechanism (column 2, lines 2-5 etc.) to the drum in a lengthwise axial manner (figure 3 and column 4, lines 55-61). For claims 14-16, see movable retaining mechanisms 52 and 53 for trapping filter elements in the drum seats. For claim 17, the drum rotates independent of relative position of any particular element (column 5, lines 55-61). For claims 21 and 22, the drum is also a part of a larger conveying system or station also comprising conveying mechanisms and magazines/hoppers (column 1, lines 53-69). For claims 23 and 24, there may be multiple numbers of drums and other device components (especially column 6, lines 41-48).

Each of the applied prior art suggests movement of drums facilitating movement of conveyor belt mechanisms for conveying the filter elements; especially in Edwards rotation of assembling drum 7, is coordinated with rotation of intermediate transfer drums 9 and 10 and drum rollers of conveyor 12; a similar arrangement is suggested by figures 1 and 2 of Kruse for movement of conveyor mechanism 5023 of Kruse.

Regarding claims 2 and 3, the references utilize the terms stub, filter and rod, interchangeably. For claim 6, Molins extensively detail details of the detector element optical and light elements. Regarding claim 7-9, the conveyor belt and stationarily positioned drive rollers thereof of Kruse constitute the claimed mechanical element/mechanism/fixed element; also see elements 12 and 13 of Edwards.

Regarding claims 23-25, in particular Molins suggests assembly systems arranged in parallel (column 6, lines 40-48 and column 7, lines 28-39).

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Claims 20,38,40 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over newly cited Kruse et al patent 3,805,477 in view of newly cited Edwards et al patent 2,649,761 and Molins et al patent 3,062,588 as applied heretofor and further in view of Bostelmann et al patent 5,641,250 or Hincliffe et al patent 4,245,934. Claims 20,38,40 and 42 further differ in requiring a mechanism to eject defective filter elements; such is taught by Bostelmann at column 6, lines 63-68. It would have also been obvious to have incorporated such defective element handling mechanism into the Kruse et al system for quality control purposes.

Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over newly cited Kruse et al patent 3,805,477 in view of newly cited Edwards et al patent 2,649,761 and Molins et al patent 3,062,588 as applied heretofor and further in view of Heitmann patent 4,618,293. Claims 11-13 differ in requiring a braking element, effective to brake the drum. Heitmann '293 teaches such braking element (column 5, line 60-column 6, line 18). It would have been obvious to one of ordinary skill in the art to have incorporated the braking element of Heitmann '293 into the Kruse et al system, to ensure cooperation of operation of conveying system including drums with the upstream or downstream magazine(s), (also see Heitmann at column 5, lines 1-6).

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over newly cited Kruse et al patent 3,805,477 in view of newly cited Edwards et al patent 2,649,761 and Molins et al patent 3,062,588 as applied heretofor and further in view of Molins et al patent 3,365,239. Claims 18 and 19 further differ in requiring an

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aligning element or mechanism. Molins '293 teaches such element (column 4, lines 44-46). It would have been obvious to one of ordinary skill in the art to have incorporated the aligning element of Molins '293 into the Kruse et al system, to facilitate accurate assembly of the filter rods into finished cigarettes.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over newly cited Kruse et al patent 3,805,477 in view of newly cited Edwards et al patent 2,649,761 and Molins et al patent 3,062,588 as applied heretofor and further in view of Heitmann et al patent 3,827,757. Claim 25 differs in requiring that the plurality of devices are arranged one below the other relative to a horizontal axis. Heitmann '757 teaches such arrangement. It would have been obvious to one of ordinary skill in the art to have incorporated the plural device arrangement of Heitmann '757 into the Kruse et al system for purposes of efficient utilization of limited space for assembling the cigarette filters.

Applicant's arguments with respect to claims 1-3,6-25 and 37-43 have been considered but are most in view of the new ground(s) of rejection.

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Any inquiry concerning this communication or earlier communications from

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the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

February 5, 2007

JOSEPH DRODGE PRIMARY EXAMINER